

900 North Skyline Drive, Suite B • Idaho Falls, Idaho 83402-1718 • (208) 528-2650

Dirk Kempthorne, Governor C. Stephen Allred, Administrator

December 22, 1999

FEDEX # 812710836487

Greg Hurless Mill Manager Thompson Creek Mining Company P.O. Box 62 Clayton, Idaho 83227

RE:

T2-990008, Thompson Creek Mining Company(TCMC), Clayton Issuance of amended Tier II Operating Permit No. 037-00001

Dear Mr. Hurless:

On December 9, 1999, a permit hand-off meeting was held at Thompson Creek Mining Company's facility near Clayton, Idaho. At the meeting, terms of the permit issued December 8, 1999, were discussed and a few changes were agreed upon by representatives of DEQ and TCMC. This permit includes those changes.

Based on review of the proposed changes and state and federal rules and regulations, DEQ finds this project meets the provision of IDAPA 16.01.01.400 (Rules for the Control of Air Pollution in Idaho). Therefore, enclosed is the final Tier II OP(#037-00001) for the emissions that exist at your facility. This Permit replaces the Tier II OP issued December 8, 1999.

You, as well as any other entity, may have the right to appeal this final agency action pursuant to the Idaho Department of Health and Welfare Rules, Title 5, Chapter 3, "Rules Governing Contested Case Proceedings and Declaratory Rulings," by filing a petition with the Hearings Coordinator, Department of Health and Welfare, Administrative Procedures Section, 450 West State Street - 10th Floor, Boise, Idaho 83720-5450, within thirty-five (35) days of the date of this decision.

If you have any questions regarding the terms or conditions of the enclosed Permit, please contact Jorge Garcia, Air Quality Science Officer, at (208) 528-2662.

Sincerely

James S. Johnst Administrator

Idaho Falls Regional Office

Enclosure

cc:

Jorge Garcia
Catherine Reno
P. Rayne, AFS
R. Wilkosz, APO
Z. Klotovich, TS
L. Krawl, EPA Region 10
Permit File Manual
WPS File
Source File (#037-00001)
COF

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	STATE OF IDAHO AIR POLLUTION OPERATING PERMIT	0 3 AQ 0 6	CR CLASS B 3 A 2 NE UTM COORDI					
	GENERAL INFORMATION		694.0	, [4 9 1 2].[0]				
1.	PERMITTEE Thompson Creek Mining Compa	inv						
2.	PROJECT Tier II Operating Permit							
3.	MAILING ADDRESS P.O. Box 62		TELEPHONE # (208) 838-2200	COUNTY Custer				
4.	CITY Clayton		STATE Idaho	ZIP CODE 83227				
5.	PERSON TO CONTACT Bert Doughty		TITLE Environmental Manager					
6.	EXACT PLANT LOCATION 2.5 Miles North of HWY 75 Betw	een Tho		reek				
7.	GENERAL NATURE OF BUSIN Molybdenum Mining							
8.	PERMIT AUTHORITY							
	This Permit is issued according to the Rules for the Control of Air Pollution in Idaho, Section 16.01.01.400 and pertains only to emissions of air contaminants which are regulated by the State of Idaho and to the sources specifically allowed to be operated by this Permit. THIS PERMIT HAS BEEN GRANTED ON THE BAS IS OF DESIGN INFORMATION PRESENTED IN THE APPLICATION AND DEQ'S TECHNICAL ANALYSIS OF THE SUPPLIED INFORMATION. CHANGES IN DESIGN OR EQUIPMENT, THAT RESULT IN ANY CHANGE IN THE NATURE OR AMOUNT OF EMISSIONS, MAY BE A MODIFICATION. MODIFICATIONS ARE SUBJECT TO DEPARTMENT REVIEW IN ACCORDANCE WITH SECTION 16.01.01.200 OF THE RULES FOR THE CONTROL OF AIR POLLUTION IN IDAHO.							

REGIONAL ADMINISTRATOR

DIVISION OF ENVIRONMENTAL QUALITY

EXPIRATION DATE __December 22, 2004

ISSUED DATE December 22, 1999

037-00001

PERMIT NUMBER

Thompson Creek Mining Company Tier II Operating Permit Clayton, Idaho

The Permittee is hereby allowed to operate the equipment described herein subject to the emission limits and monitoring and reporting requirements specified in this Permit.

SOURCE

Portable Crusher

1. EMISSION LIMITS

- 1.1 Emissions of particulate matter (PM) from the portable crusher shall not exceed the corresponding emission rate limit listed in Appendix A.
- 1.2 Visible emissions shall not exceed twenty percent (20%) opacity for a period or periods aggregating more than three (3) minutes in any sixty (60) minute period, as required in IDAPA 16.01.01.625. Opacity will be determined using U.S. EPA Reference Method 9.
- 1.3 Fugitive emissions of particulate matter (PM) and particulate matter with an aerodynamic diameter less than or equal to ten (10) micrometers (PM-10) shall be reasonably controlled, as required in IDAPA 16.01.01.650 and 651.
- 1.4 Fugitive emissions shall not be observed leaving the mine site boundary for a period or periods aggregating more than three (3) minutes in any sixty (60) minute period. Visible emissions shall be determined by Method 22, as described in 40 CFR Part 60, Appendix A, or a DEQ-approved alternative method.

2. OPERATING REQUIREMENTS

- 2.1 Emissions of particulate matter (PM) and particulate matter with an aerodynamic diameter less than or equal to ten (10) micrometers (PM-10), from the portable crusher, shall be reasonably controlled. Reasonable control may include, but is not limited to, the use of water sprays or environmentally safe chemicals.
- 2.2 The production rate of the portable rock crusher shall not exceed a maximum of seven hundred thousand tons per any consecutive 12-month period (700,000 T/yr).

3. MONITORING REQUIREMENTS

Each calendar month, the Permittee shall monitor the hours of operation of the water sprays and the total throughput to the portable rock crusher for that month, and for the previous consecutive 12-month period.

4. REPORTING AND RECORDKEEPING REQUIREMENTS

The Permittee shall record, in a monthly report, the information requested in Section 3 of this Permit. This report shall be maintained on file by the Permittee for the most recent five (5) year period and made available to DEQ representatives upon request.

ISSUED: December 22, 1999 EXPIRES: December 22, 2004

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Thompson Creek Mining Company Tier II Operating Permit Clayton, Idaho

PERMIT NUMBER

0 3 7 - 0 0 0 0 1

The Permittee is hereby allowed to operate the equipment described herein subject to the emission limits and monitoring and reporting requirements specified in this permit.

SOURCE

Primary (Gyratory) Crusher

1. EMISSION LIMITS

- 1.1 Emissions of particulate matter (PM) from the Primary (Gyratory) Crusher shall not exceed the corresponding emission rate limit listed in Appendix A.
- 1.2 Visible emissions shall not exceed twenty percent (20%) opacity for a period or periods aggregating more than three (3) minutes in any sixty (60) minute period, as required in IDAPA 16.01.01.625. Opacity will be determined using U.S. EPA Reference Method 9.
- 1.3 Fugitive emissions of particulate matter (PM), and particulate matter with an aerodynamic diameter less than or equal to ten (10) micrometers (PM-10), shall be reasonably controlled, as required in IDAPA 16.01.01.650 and 651.

2. OPERATING REQUIREMENTS

- 2.1 Throughput of the Primary (Gyratory) Crusher shall not exceed 78,000 tons per day (T/day).
- 2.2 Throughput of the Primary (Gyratory) Crusher shall not exceed 16,242,500 tons in any consecutive 12-month period (T/yr).

3. MONITORING REQUIREMENTS

The Permittee shall monitor and record the tons of material processed per day by the Primary (Gyratory) Crusher. Each calendar month, the Permittee shall record the throughput of the Primary (Gyratory) Crusher for the previous consecutive 12-month period.

4. REPORTING AND RECORDKEEPING REQUIREMENTS

The Permittee shall record, in a monthly report, the information requested in Section 3 of this Permit. This report shall be maintained on file by the Permittee, for the most recent five (5) year period, and made available to DEQ representatives upon request.

ISSUED: December 22, 1999 EXPIRES: December 22, 2004

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037-00001

PERMIT NUMBER

Thompson Creek Mining Company Tier II Operating Permit Clayton, Idaho

The Permittee is hereby allowed to operate the equipment described herein subject to the emission limits and monitoring and reporting requirements specified in this permit.

SOURCE

Overland Conveyor Drive House

1. EMISSION LIMITS

- 1.1 Emissions of particulate matter (PM) from the Overland Conveyor Drive House shall not exceed the corresponding emission rate limit listed in Appendix A.
- 1.2 Visible emissions shall not exceed twenty percent (20%) opacity for a period or periods aggregating more than three (3) minutes in any sixty (60) minute period, as required in IDAPA 16.01.01.625. Opacity will be determined using U.S. EPA Reference Method 9.
- 1.3 Fugitive emissions of particulate matter (PM), and particulate matter with an aerodynamic diameter less than or equal to ten (10) micrometers (PM-10), shall be reasonably controlled as required in IDAPA 16.01.01.650 and 651.

2. OPERATING REQUIREMENTS

- 2.1 Throughput of the Overland Conveyor Drive House shall not exceed 78,000 tons per day (T/day).
- 2.2 Throughput of the Overland Conveyor Drive House shall not exceed 16,242,500 tons per any consecutive 12-month period (T/yr).

3. MONITORING REQUIREMENTS

- 3.1 The Permittee shall monitor and record the tons of material processed per day by the Overland Conveyor Drive House. Each calendar month, the Permittee shall record the throughput of the Overland Conveyor Drive House for the previous consecutive 12-month period.
- 3.2 Visible emissions, as determined using U.S. EPA Reference Method 9, shall be observed and recorded once per calendar month.

4. REPORTING AND RECORDKEEPING REQUIREMENTS

The Permittee shall record, in a monthly report, the information requested in Sections 3.1 and 3.2 of this Permit. This report shall be maintained on file by the Permittee, for the most recent five (5) year period, and made available to DEQ representatives upon request.

ISSUED: December 22, 1999 EXPIRES: December 22, 2004

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Thompson Creek Mining Company Tier II Operating Permit Clayton, Idaho

PERMIT NUMBER

037-00001

The Permittee is hereby allowed to operate the equipment described herein subject to the emission limits and monitoring and reporting requirements specified in this permit.

SOURCE

East and West Ore Feeders

1. EMISSION LIMITS

- 1.1 Emissions of particulate matter (PM) from the East and West Ore Feeders shall not exceed the corresponding emission rate limit listed in Appendix A.
- 1.2 Visible emissions shall not exceed twenty percent (20%) opacity for a period or periods aggregating more than three (3) minutes in any sixty (60) minute period, as required in IDAPA 16.01.01.625. Opacity will be determined using U.S. EPA Reference Method 9.
- 1.3 Fugitive emissions of particulate matter (PM), and particulate matter with an aerodynamic diameter less than or equal to ten (10) micrometers (PM-10), shall be reasonably controlled as required in IDAPA 16.01.01.650 and 651.

2. OPERATING REQUIREMENTS

- 2.1 Throughput of the East and West Ore Feeders shall not exceed 40,000 tons per day (T/day).
- 2.2 Throughput of the East and West Ore Feeders shall not exceed 14,600,000 tons per any consecutive 12-month period (T/yr).

3. MONITORING REQUIREMENTS

The Permittee shall monitor and record the tons of material processed per day by the East and West Ore Feeders. Each calendar month, the Permittee shall record the throughput of the East and West Ore Feeders for the previous consecutive 12-month period.

4. REPORTING AND RECORDKEEPING REQUIREMENTS

The Permittee shall record, in a monthly report, the information requested in Section 3 of this Permit. This report shall be maintained on file by the Permittee, for the most recent five (5) year period, and made available to DEQ representatives upon request.

ISSUED: December 22, 1999 EXPIRES: December 22, 2004

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PERMIT NUMBER

Thompson Creek Mining Company Tier II Operating Permit Clayton, Idaho

The Permittee is hereby allowed to operate the equipment described herein subject to the emission limits and monitoring and reporting requirements specified in this permit.

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Holoflite Dryer #1

1. EMISSION LIMITS

- 1.1 Emissions of particulate matter (PM) from the Holoflite Dryer #1 shall not exceed the corresponding emission rate limit listed in Appendix A.
- 1.2 Visible emissions shall not exceed twenty percent (20%) opacity for a period or periods aggregating more than three (3) minutes in any sixty (60) minute period, as required in IDAPA 16.01.01.625. Visible emissions shall be determined using U.S. EPA Reference Method 9.
- 1.3 Fugitive emissions of particulate matter (PM), and particulate matter with an aerodynamic diameter less than or equal to ten (10) micrometers (PM-10), shall be reasonably controlled as required in IDAPA 16.01.01.650 and 651.

2. OPERATING REQUIREMENTS

- 2.1 Holoflite Dryer #1 shall process no more than 160 tons per day (T/day).
- 2.2 Holoflite Dryer #1 shall process no more than 81,030 tons per any consecutive 12-month period (T/yr).

3. MONITORING REQUIREMENTS

- 3.1 The Permittee shall monitor and record the tons of material processed per day by Holoflite Dryer #1. Each calendar month, the Permittee shall record the throughput of the Holoflite Dryer #1 for the previous consecutive 12-month period.
- 3.2 Visible emissions, as determined using U.S. EPA Reference Method 9, shall be observed and recorded once per calendar month.

4. REPORTING AND RECORDKEEPING REQUIREMENTS

The Permittee shall record, in a monthly report, the information requested in Sections 3.1 and 3.2 of this Permit. This report shall be maintained on file by the Permittee, for the most recent five (5) year period, and made available to DEQ representatives upon request.

ISSUED: December 22, 1999 EXPIRES: December 22, 2004

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Thompson Creek Mining Company Tier II Operating Permit Clayton, Idaho

PERMIT NUMBER

037-00001

The Permittee is hereby allowed to operate the equipment described herein subject to the emission limits and monitoring and reporting requirements specified in this Permit.

SOURCE

Holoflite Dryer #2 & Rotary Kiln-Each has a separate venturi scrubber, and both are vented through a common stack.

1. EMISSION LIMITS

- 1.1 Total suspended particulate (TSP) emissions from the lube grade dryer stack shall not exceed 0.05 grams per dry standard cubic meter (g/dscm), as required in 40 CFR 60 Subpart LL, and the pound per hour (lb/hr) and ton per year (T/yr) values listed in Appendix A.
- 1.2 PM-10 (Particulate matter with an aerodynamic diameter less than a nominal ten (10) microns refer to 40 CFR 51.100) emissions from the lube grade stack shall not exceed the pound per hour (lb/hr) and ton per year (T/yr) values listed in Appendix A.
- 1.3 Volatile organic carbon (VOC) emissions from the lube grade stack shall not exceed the pound per hour (lb/hr) and ton per year (T/yr) values listed in Appendix A.
- 1.4 Visible emissions from the lube grade stack shall not exceed twenty percent (20%) opacity for a period or periods aggregating more than three (3) minutes in any sixty (60) minute period, as required by IDAPA 16.01.01.625. Visible emissions will be determined using U.S. EPA Reference Method 9.
- 1.5 Fugitive emissions shall not be visible outside the building, which houses this process, as determined by EPA Reference Method 22.
- 1.6 Fugitive emissions of particulate matter (PM), and particulate matter with an aerodynamic diameter less than or equal to ten (10) micrometers (PM-10), shall be reasonably controlled as required in IDAPA 16.01.01.650 and 651.

2. OPERATING REQUIREMENTS

- 2.1 Emissions from the Holoflite Dryer #2 and rotary kiln shall each be controlled by a venturi scrubber, and are then vented through a common stack (referred to here as the lube grade dryer stack) which shall be controlled by an electrostatic precipitator.
- 2.2 Holoflite Dryer #2 shall process no more than two thousand pounds of molybdenum disulfide (MoS₂) per hour (2,000 lb/hr). The rotary kiln shall process no more than two thousand pounds of molybdenum disulfide (MoS₂) per hour (2,000 lb/hr).
- 2.3 The scrubbing liquid flowrate and pressure drop across the Holoflite Dryer #2's venturi scrubber shall be maintained within ±30% of the average scrubbing liquid flowrate and pressure drop measured during the most recent performance test. The scrubbing liquid flowrate and pressure drop across the rotary kiln's venturi scrubber shall be maintained within ±30% of the average scrubbing liquid flowrate and pressure drop measured during the most recent performance test.

ISSUED: December 22, 1999 EXPIRES: December 22, 2004

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Thompson Creek Mining Company Tier II Operating Permit Clayton, Idaho

PERMIT NUMBER

037-00001

The Permittee is hereby allowed to operate the equipment described herein subject to the emission limits and monitoring and reporting requirements specified in this Permit.

SOURCE

Holoflite Dryer #2 & Rotary Kiln-Each has a separate venturi scrubber, and both are vented through a common stack.

MONITORING REQUIREMENTS

- 3.1 Monitoring requirements shall be in accordance with 40 CFR 60, Subpart LL.
- 3.2 The Permittee shall calibrate, maintain, and operate a monitoring device, which continuously measures the change in pressure of the gas stream through the Holoflite dryer #2 and rotary kiln venturi scrubbers.
- 3.3 The Permittee shall calibrate, maintain, and operate a monitoring device, which continuously measures the scrubbing liquid flow rate to the Holoflite dryer #2 venturi scrubber and rotary kiln venturi scrubber.
- The Permittee shall monitor and record the pounds of material processed per day by the rotary kiln. The Permittee shall monitor and record the pounds of material processed per day by the Holoflite Dryer #2.

4. RECORDKEEPING AND REPORTING REQUIREMENTS

- 4.1 Recordkeeping and reporting requirements shall be in accordance with 40 CFR 60 Subpart LL.
- 4.2 Once per calender week, the Permittee shall record the measurements of both the pressure drop across the scrubber and scrubbing liquid flowrate for the Holoflite Dryer venturi scrubber and the rotary kiln venturi scrubber.
- 4.3 The Permittee shall submit semi-annual (once every six months) reports to DEQ of data required by Section 4.2, when the measurements of pressure drop or liquid flow rate differ by more than plus or minus thirty percent (±30%) from the values given in Section 2.3 of this Permit. The reports shall be postmarked within 30 days following the end of the 2nd and 4th calendar quarters.
- 4.4 Scrubbing liquid flowrate and pressure drop data, from the most recent performance tests performed on the Holoflite dryer and rotary kiln venturi scrubbers, shall be maintained on-site for the most recent five (5) years.

ISSUED: December 22, 1999 EXPIRES: December 22, 2004

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PERMIT NUMBER
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Thompson Creek Mining Company Tier II Operating Permit Clayton, Idaho

The Permittee is hereby allowed to operate the equipment described herein subject to the emission limits and monitoring and reporting requirements specified in this permit.

SOURCE

Jet Mill and the MoS, Packaging Area

1. EMISSION LIMITS

- 1.1 Total suspended particulate (TSP) emissions from the jet mill baghouse stack shall not exceed 0.05 grams per dry standard cubic meter (g/dscm), as required by 40 CFR 60 Subpart LL, and the pound per hour (lb/hr) and ton per year (T/yr) limits listed in Appendix A of this Permit.
- 1.2 PM-10 emissions from the jet mill baghouse stack shall not exceed the pound per hour (lb/hr) and ton per year (T/yr) limits in Appendix A.
- 1.3 Visible emissions from the jet mill baghouse stack shall not exceed seven percent (7%) opacity as required in 40 CFR 60.382(a)(2). Opacity shall be determined using EPA Reference Method 9.
- 1.4 Total suspended particulate (TSP) emissions from the storage bin baghouse stack shall not exceed 0.056 grams per dry standard cubic meter (g/m³), as required by 40 CFR 60 Subpart LL, and the pound per hour (lb/hr) and ton per year (T/yr) limits listed in Appendix A of this Permit.
- 1.5 PM-10 emissions from the storage bin baghouse stack shall not exceed the pound per hour (lb/hr) and ton per year (T/yr) limits in Appendix A.
- 1.6 Visible emissions from the storage bin baghouse stack shall not exceed seven percent (7%) opacity as required in 40 CFR 60, Subpart LL. Opacity shall be determined using EPA Reference Method 9.
- 1.7 Fugitive emissions shall not be visible outside the building, which houses this process, as determined by EPA Reference Method 22.

2. OPERATING REQUIREMENTS

- 2.1 The Jet Mill shall process no more than 1600 pounds of MoS₂ per hour (lb/hr).
- 2.2 Emissions from the jet mill shall be controlled by a baghouse and vented through the jet mill baghouse stack. Emissions from the packaging of the finished product shall be minimized by being enclosed in a building. Fugitive particulate emissions, generated from pneumatically conveying the lube grade MoS₂ into the ten ton storage bin, shall be controlled by a baghouse and vented through the storage bin baghouse vent.
- 2.3 Fugitive emissions of particulate matter (PM), and particulate matter with an aerodynamic diameter less than or equal to ten (10) micrometers (PM-10), shall be reasonably controlled as required in IDAPA 16.01.01.650 and 651.

3. MONITORING REQUIREMENTS

3.1 The Permittee shall monitor and record the average process rate, in pounds per hour, of each operating shift.
The process rate shall be calculated by dividing the amount of material processed for each operating shift by the actual hours of operation for that same shift.

ISSUED: December 22, 1999 EXPIRES: December 22, 2004

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Page 10 of 20

AIR POLLUTION OPERATING PERMIT PERMITTEE, PROJECT, AND LOCATION

Thompson Creek Mining Company Tier II Operating Permit Clayton, Idaho

PERMIT NUMBER

037-00001

The Permittee is hereby allowed to operate the equipment described herein subject to the emission limits and monitoring and reporting requirements specified in this permit.

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Jet Mill and the MoS₂ Packaging Area

4. RECORDKEEPING AND REPORTING REQUIREMENTS

The Permittee shall record, in a monthly report, the information requested in Section 3.1 of this Permit. This report shall be maintained on file by the Permittee, for the most recent five (5) year period, and made available to DEQ representatives upon request.

ISSUED: December 22, 1999 EXPIRES: December 22, 2004

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Thompson Creek Mining Company Tier II Operating Permit Clayton, Idaho

PERMIT NUMBER

037-00001

The Permittee is hereby allowed to operate the equipment described herein subject to the emission limits and monitoring and reporting requirements specified in this permit.

SOURCE

Super Fine Grade Molybdenum Production Circuit

1. EMISSION LIMITS

- 1.1 Particulate matter emissions from the pancake mill feed bin shall not exceed 0.05 grams per dry standard cubic meter as required in 40 CFR 60 Subpart LL, and the pound per hour (lb/hr) and ton per year (T/yr) limits listed in Appendix A of this Permit.
- 1.2 Particulate matter emissions from the "super fine" molybdenum storage bin shall not exceed 0.05 grams per dry standard cubic meter as required in 40 CFR 60 Subpart LL, and the pound per hour (lb/hr)and ton per year (T/yr) limits listed in Appendix A of this Permit.
- 1.3 Visible emissions from each bin stack shall not exceed seven percent (7%) opacity as required in 40 CFR 60.382(a)(2). Opacity shall be determined using EPA Reference Method 9.
- 1.4 Fugitive emissions shall not be visible outside the building, which houses this process, as determined by EPA Reference Method 22.

2. OPERATING REQUIREMENTS

- 2.1 The maximum hourly conveying rate of any portion of the "super fine" molybdenum production circuit shall not exceed eight hundred fifty pounds per hour (850 lb/hr), nor shall it exceed two hundred eighty-four tons in any consecutive 12-month period (284 T/yr).
- 2.2 Equipment shall be installed, maintained and operated in good working condition, to continuously measure pressure drop across the particulate matter control devices on the pancake mill feed bin and "super fine" storage bin.
- 2.3 Pressure drop across the particulate matter control devices shall not fall below the average low pressure drop of the performance test runs demonstrating compliance with Section 1.1 and 1.2. Pressure drop across the particulate matter control devices shall not exceed manufacturer's specifications for the upper pressure drop. Documentation of the operating pressure drop specifications for the baghouse shall remain on site at all times, and shall be made available to DEQ representatives upon request.

3. MONITORING REQUIREMENTS

- 3.1 The Permittee shall monitor and record the tons of material conveyed per hour by any portion of the "super fine" molybdenum production circuit. Each calendar month, the Permittee shall record the tons of material conveyed by the "super fine" molybdenum production circuit for the previous consecutive 12-month period.
- 3.2 Pressure drop across the particulate matter control devices on the pancake mill feed bin and "super fine" molybdenum storage bin shall be monitored and recorded once per calendar week. These readings shall be maintained on-site for a period of five (5) years and made available to DEQ representatives upon request.

ISSUED: December 22, 1999 EXPIRES: December 22, 2004

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Thompson Creek Mining Company Tier II Operating Permit Clayton, Idaho

PERMIT NUMBER

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The Permittee is hereby allowed to operate the equipment described herein subject to the emission limits and monitoring and reporting requirements specified in this permit.

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Super Fine Grade Molybdenum Production Circuit

4. REPORTING REQUIREMENTS

- 4.1 The Permittee shall record, in a monthly report, the information requested in Sections 3.1 and 3.2 of this Permit.

 This report shall be maintained on file by the Permittee, for the most recent five (5) year period, and made available to DEQ representatives upon request.
- 4.2 Pressure drop data from the most recent performance tests performed on the particulate matter control devices on the pancake mill feed bin, and "super fine" molybdenum storage bin shall be maintained on-site for the most recent five (5) years.

ISSUED: December 22, 1999 EXPIRES: December 22, 2004

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PERMIT NUMBER

0 3 7 - 0 0 0 0 1

Thompson Creek Mining Company Tier II Operating Permit] Clayton, Idaho

The Permittee is hereby allowed to operate the equipment described herein subject to the emission limits and monitoring and reporting requirements specified in this Permit.

SOURCE

Pebble Lime Baghouse

1. EMISSION LIMITS

- 1.1 Emissions of particulate matter (PM) from the pebble lime baghouse stack shall not exceed the corresponding emission rate limit listed in Appendix A.
- 1.2 Visible emissions shall not exceed twenty percent (20%) opacity for a period or periods aggregating more than three (3) minutes in any sixty (60) minute period, as required in IDAPA 16.01.01.625. Opacity will be determined using U.S. EPA Reference Method 9.
- 1.3 Fugitive emissions of particulate matter (PM) and particulate matter with an aerodynamic diameter less than or equal to ten (10) micrometers (PM-10) shall be reasonably controlled, as required in IDAPA 16.01.01.650 and 651.

2. OPERATING REQUIREMENT

The pebble lime baghouse shall process no more than twelve tons of limestone per hour (12.0 T/hr). The pebble lime baghouse shall process no more than five thousand tons of limestone per any consecutive 12-month period (5,000 T/yr).

3. MONITORING REQUIREMENTS

3.1 The Permittee shall record the tons of material processed per hour by the pebble lime baghouse. This value shall be determined as follows:

TPH = WT + TIME

Where,

TPH = tons per hour of material processed by the pebble lime baghouse

WT = tons of material processed per operating shift;

TIME = actual hours of operation per operating shift

- 3.2 The Permittee shall record the actual hours of operation per operating shift of the pebble lime baghouse.
- 3.3 The Permittee shall record the amount, in tons, of material processed per operating shift by the pebble lime baghouse.
- 3.4 Each calendar month, the Permittee shall record the tons of material processed by the pebble lime baghouse for that month and the previous consecutive 12-month period.
- 3.5 Visible emissions, as determined using U.S. EPA Reference Method 9, shall be observed and recorded once per calendar month.

4. REPORTING AND RECORDKEEPING REQUIREMENTS

The Permittee shall record, in a monthly report, the information requested in Sections 3.1, 3.2, 3.3, 3.4 and 3.5 of this Permit. This report shall be maintained on file by the Permittee, for the most recent five (5) year period, and made available to DEQ representatives upon request.

ISSUED: December 22, 1999 EXPIRES: December 22, 2004

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PERMIT NUMBER

Thompson Creek Mining Company Tier II Operating Permit] Clayton, Idaho

The Permittee is hereby allowed to operate the equipment described herein subject to the emission limits and monitoring and reporting requirements specified in this Permit.

SOURCE

Boiler #1 and Hot Oil Boiler #1

1. EMISSION LIMITS

- 1.1 Emissions of oxides of nitrogen (NO_x) and particulate matter (PM) from the Boiler #1 and Hot Oil Boiler #1 stacks shall not exceed the corresponding emission rate limits listed in Appendix A.
- 1.2 Particulate emissions from each stack shall not exceed 0.05 grains per dry standard cubic foot (corrected to 3% oxygen) when combusting oil, as required in IDAPA 16.01.01.676 (Rules for the Control of Air Pollution In Idaho).
- 1.3 Visible emissions from each stack shall not exceed twenty percent (20%) opacity for a period or periods aggregating more than three (3) minutes in any sixty (60) minute period, as required in IDAPA 16.01.01.625. Opacity will be determined using U.S. EPA Reference Method 9.

2. OPERATING REQUIREMENTS

- 2.1 Distillate (ASTM Grade #1 or #2) fuel oil burned shall not contain sulfur in exceedance of 0.3 percent by weight if grade #1 oil is used, or 0.5 percent by weight if grade #2 oil is used, as required by IDAPA 16.01.01.728.
- 2.2 Boiler #1 shall burn no more than 289,080 gallons of fuel oil per any consecutive 12-month period. Hot Oil Boiler #1 shall burn no more than 118,260 gallons of fuel oil per any consecutive 12-month period.

3. MONITORING REQUIREMENTS

3.1 The Permittee shall analyze the fuel in the fuel storage tanks once per calendar quarter in accordance with IDAPA 16.01.01.157 to determine the sulfur content by weight of the fuel oil. Each tank analyzation shall be at least 60 days apart. When the sulfur content of the fuel oil exceeds 0.3 percent by weight, the Permittee shall determine the allowable sulfur content of the fuel in the storage tanks using the following equation:

SulfurContent =
$$(\sum_{i=1}^{n} ((X_i * 0.3) + (Y_i * 0.5)) \times G_i) \div \sum_{i=1}^{n} G_i$$

Sulfur Content = Allowable weight percent sulfur in tank

n = Number of fuel loads delivered during the quarter following the last test

X_i = Percent grade #1 fuel oil in load i

0.3 = Allowable weight percent sulfur in grade #1 fuel oil

Y_i = Percent grade #2 fuel oil in load i

0.5 = Allowable weight percent sulfur in grade #2 fuel oil

G = Gallons in load i

ISSUED: December 22, 1999 EXPIRES: December 22, 2004

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PERMIT NUMBER
0 3 7 - 0 0 0 0

Thompson Creek Mining Company Tier II Operating Permit] Clayton, Idaho

The Permittee is hereby allowed to operate the equipment described herein subject to the emission limits and monitoring and reporting requirements specified in this Permit.

SOURCE

Boiler #1 and Hot Oil Boiler #1

- 3.2 Each calendar month, the Permittee shall monitor and record the amount, in gallons, of fuel oil burned by each boiler for that calendar month, and for the previous consecutive 12-month period. This amount, clearly specified for each boiler, shall be recorded in gallons to demonstrate compliance with Section 2.2 of this Permit.
- 4. REPORTING AND RECORDKEEPING REQUIREMENTS

The Permittee shall record, in a monthly report, the information requested in Sections 3.1 and 3.2 of this Permit. This report shall be maintained on file by the Permittee for the most recent five (5) year period, and made available to DEQ representatives upon request.

ISSUED: December 22, 1999 EXPIRES: December 22, 2004

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Thompson Creek Mining Company Tier II Operating Permit] Clayton, Idaho

PERMIT NUMBER

037-00001

The Permittee is hereby allowed to operate the equipment described herein subject to the emission limits and monitoring and reporting requirements specified in this Permit.

SOURCE

Motivator

1. EMISSION LIMITS

- 1.1 Emissions of particulate matter (PM) and oxides of nitrogen (NO_x) from the Motivator shall not exceed the corresponding emission rate limit listed in Appendix A.
- 1.2 Visible emissions shall not exceed twenty percent (20%) opacity for a period or periods aggregating more than three (3) minutes in any sixty (60) minute period, as required in IDAPA 16.01.01.625. Opacity will be determined using U.S. EPA Reference Method 9.

2. OPERATING REQUIREMENTS

- 2.1 Distillate (ASTM Grade #1 or #2) fuel oil burned shall not contain sulfur in exceedance of 0.3 percent by weight if grade #1 oil is used, or 0.5 percent by weight if grade #2 oil is used, as required by IDAPA 16.01.01.728.
- 2.2 The Motivator shall operate no more than 3,000 hours per any consecutive 12-month period.

3. MONITORING REQUIREMENTS

3.1 The Permittee shall analyze the fuel in the fuel storage tanks once per calendar quarter in accordance with IDAPA 16.01.01.157 to determine the sulfur content, by weight, of the fuel oil. Each tank analyzation shall be at least 60 days apart. When the sulfur content of the fuel oil exceeds 0.3 percent by weight, the Permittee shall determine the allowable sulfur content of the fuel in the storage tanks using the following equation:

SulfurContent =
$$(\sum_{i=1}^{n} ((X_i * 0.3) + (Y_i * 0.5)) \times G_i) \div \sum_{i=1}^{n} G_i$$

Sulfur Content = Allowable weight percent sulfur in tank

n = Number of fuel loads delivered during the quarter following the last test

X_i = Percent grade #1 fuel oil in load i

0.3 = Allowable weight percent sulfur in grade #1 fuel oil

Y_i = Percent grade #2 fuel oil in load i

0.5 = Allowable weight percent sulfur in grade #2 fuel oil

G = Gallons in load i

3.2 Each calendar month, the Permittee shall monitor and record the actual hours of operation of the Motivator for that calendar month, and the previous consecutive 12-month period.

4. REPORTING AND RECORDKEEPING REQUIREMENTS

The Permittee shall record, in a monthly report, the information requested in Sections 3.1 and 3.2 of this Permit. This report shall be maintained on file by the Permittee, for the most recent five (5) year period, and made available to DEQ representatives upon request.

ISSUED: December 22, 1999 EXPIRES: December 22, 2004

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Thompson Creek Mining Company Tier II Operating Permit] Clayton, Idaho

PERMIT NUMBER

037-00001

The Permittee is hereby allowed to operate the equipment described herein subject to the emission limits and monitoring and reporting requirements specified in this Permit.

SOURCE

Mill Auxiliary Generator

1. EMISSION LIMITS

- 1.1 Emissions of particulate matter (PM) and oxides of nitrogen (NO_x) from the Mill Auxiliary Generator shall not exceed the corresponding emission rate limit listed in Appendix A.
- 1.2 Visible emissions shall not exceed twenty percent (20%) opacity for a period or periods aggregating more than three (3) minutes in any sixty (60) minute period, as required in IDAPA 16.01.01.625. Opacity will be determined using U.S. EPA Reference Method 9.

2. OPERATING REQUIREMENTS

- 2.1 Distillate (ASTM Grade #1 or #2) fuel oil burned shall not contain sulfur in exceedance of 0.3 percent by weight if grade #1 oil is used, or 0.5 percent by weight if grade #2 oil is used, as required by IDAPA 16.01.01.728.
- 2.2 The Mill Auxiliary Generator shall operate no more than 500 hours per any consecutive 12-month period.

3. MONITORING REQUIREMENTS

3.1 The Permittee shall analyze the fuel in the fuel storage tanks once per calendar quarter in accordance with IDAPA 16.01.01.157 to determine the sulfur content by weight of the fuel oil. Each tank analyzation shall be at least 60 days apart. When the sulfur content of the fuel oil exceeds 0.3 percent by weight, the Permittee shall determine the allowable sulfur content of the fuel in the storage tanks using the following equation:

SulfurContent =
$$(\sum_{i=1}^{n} ((X_i * 0.3) + (Y_i * 0.5)) \times G_i) \div \sum_{i=1}^{n} G_i$$

Sulfur Content = Allowable weight percent sulfur in tank

n = Number of fuel loads delivered during the quarter following the last test

X = Percent grade #1 fuel oil in load i

0.3 = Allowable weight percent sulfur in grade #1 fuel oil

Y, = Percent grade #2 fuel oil in load i

0.5 = Allowable weight percent sulfur in grade #2 fuel oil

G. = Gallons in load l

3.2 Each calendar month, the Permittee shall record the actual hours of operation of the Mill Auxiliary Generator for that calendar month, and for the previous consecutive 12-month period.

4. REPORTING AND RECORDKEEPING REQUIREMENTS

The Permittee shall record, in a monthly report, the information requested in Sections 3.1 and 3.2 of this Permit. This report shall be maintained on file by the Permittee, for the most recent five (5) year period, and made available to DEQ representatives upon request.

ISSUED: December 22, 1999 EXPIRES: December 22, 2004

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PERMIT NUMBER

0 3 7 - 0 0 0 0 1

Thompson Creek Mining Company Tier II Operating Permit] Clayton, Idaho

The Permittee is hereby allowed to operate the equipment described herein subject to the emission limits and monitoring and reporting requirements specified in this Permit.

SOURCE

Pumpback Generator

1. EMISSION LIMITS

- 1.1 Emissions of particulate matter (PM) and oxides of nitrogen (NO_x) from the pumpback generator shall not exceed the corresponding emission rate limit listed in Appendix A.
- 1.2 Visible emissions shall not exceed twenty percent (20%) opacity for a period or periods aggregating more than three (3) minutes in any sixty (60) minute period, as required in IDAPA 16.01.01.625. Opacity will be determined using U.S. EPA Reference Method 9.

OPERATING REQUIREMENTS

- 2.1 Distillate (ASTM Grade #1 or #2) fuel oil burned shall not contain sulfur in exceedance of 0.3 percent by weight if grade #1 oil is used, or 0.5 percent by weight if grade #2 oil is used, as required by IDAPA 16.01.01.728.
- 2.2 The pumpback generator shall operate no more than 500 hours per any consecutive 12-month period.

3. MONITORING REQUIREMENTS

The Permittee shall analyze the fuel in the fuel storage tanks once per calendar quarter in accordance with IDAPA 16.01.01.157 to determine the sulfur content by weight of the fuel oil. Each tank analyzation shall be at least 60 days apart. When the sulfur content of the fuel oil exceeds 0.3 percent by weight, the Permittee shall determine the allowable sulfur content of the fuel in the storage tanks using the following equation:

SulfurContent =
$$(\sum_{i=1}^{n} ((X_i * 0.3) + (Y_i * 0.5)) \times G_i) \div \sum_{i=1}^{n} G_i$$

Sulfur Content = Allowable weight percent sulfur in tank

n = Number of fuel loads delivered during the quarter following the last test

X: = Percent grade #1 fuel oil in load i

0.3 = Allowable weight percent sulfur in grade #1 fuel oil

Y, = Percent grade #2 fuel oil in load i

0.5 = Allowable weight percent sulfur in grade #2 fuel oil

G. = Gallons in load I

3.2 Each calendar month, the Permittee shall monitor and record the hours of operation of the pumpback generator for that calendar month, and for the previous consecutive 12-month period.

4. REPORTING AND RECORDKEEPING REQUIREMENTS

The Permittee shall record, in a monthly report, the information requested in Sections 3.1 and 3.2 of this Permit. This report shall be maintained on file by the Permittee, for the most recent five (5) year period, and made available to DEQ representatives upon request.

ISSUED: December 22, 1999 EXPIRES: December 22, 2004

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PERMIT NUMBER

Thompson Creek Mining Company Tier II Operating Permit] Clayton, Idaho 037-00001

The Permittee is hereby allowed to operate the equipment described herein subject to the emission limits and monitoring and reporting requirements specified in this Permit.

SOURCE			
Appendix A			

APPENDIX A

THOMPSON CREEK MINING COMPANY - CLAYTON EMISSION LIMITS' -- HOURLY (Ib/hr) OR DAILY (Ib/day) AND ANNUAL^b (ton/yr)

EMISSION UNIT DESCRIPTION	PM		рм-	рм-10		NO _x		voc	
	lb/hr	lb/day	T/yr	lb/hr	T/Yr	lb/hr	T/yr	lb/hr	T/yr
Portable Crusher, S-C2		.	15	.	<u>-</u>		-	-	-
Primary Crusher, S-C1	-	390	45.0	<u>.</u>	-	-	+	-	-
Conveyor Drive House, S-T1	•	93.6	12.0		*	-	*	*	
East and West Ore Feeders, S-F1 & S-F2	-	48	8.8	-	-	+	-	-	-
Holoflite Dryer #1, S-D1	-	7.9	1.0	-	*		-	-	-
Pebble Lime Baghouse, S-PL1	0.26		0,5		-	-		<u>.</u>	
Boiler #1, S-B1	0.04		0.15	÷	-	0.27	1.18	•	-
Hot Oil Boller #1, S-B2	0.07		0,35	-	_	0.66	2.89	<u>.</u>	-
Motivator, S-AX1	0.2	<u> </u>	0.35	-		35.8	53.64		*
Mill Auxiliary Generator	0.6		0.14	+	-	8.2	2.05	•	-
Pumpback Generator	1.0		0.25	-	-	13.9	3,49	-	•
Lube Grade Dryer Stack	0.025	•	0.111	0.025	0.111	-	•	2,6	10.3
Jet Mill Baghouse Stack	0.303	•	0.315	0.303	0.315	*	-	-	
Storage Bin Baghouse	0.084		.087	0.084	0.087	*	_	-	
Mill Feed Bin	0.013		0.028	*	-	-		-	*
"Super Fine" Molybdenum Storage Bin	0.078	-	0.17	-		-	-	*	-
TOTAL			84,251		0.513		63.25		10.3

As determined by a pollutant specific promulgated U.S. EPA method, or DEQ-approved alternative, or as determined by DEQ's emission estimation methods used in this permit analysis.

c. Common stack for Holoflite Dryer #2 and rotary kitn.

ISSUED: December 22, 1999 EXPIRES: December 22, 2004

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b. As determined by multiplying the actual or allowable (if actual is not available) pound per hour emission rate by the actual hours per year that the process operates.

TIER II OPERATING PERMIT GENERAL PROVISIONS

- All emissions authorized herein shall be consistent with the terms and conditions of this permit. The emission of any pollutant in excess of the limitations specified herein, or noncompliance with any other condition or limitation contained in this permit, shall constitute a violation of this permit and the Rules for the Control of Air Pollution in Idaho, and the Environmental Protection and Health Act, Idaho Code 39-101 et. seq.
- B. The Permittee shall at all times (except as provided in the Rules for the Control of Air Pollution in Idaho) maintain and operate in good working order all treatment or control facilities or systems installed or used to achieve compliance with the terms and conditions of this permit and other applicable laws for the control of air pollution.
- C. The Permittee shall allow the Director, and/or his authorized representative(s), upon the presentation of credentials:
 - To enter upon the Permittee's premises where an emission source is located, or in which any records are required to be kept under the terms and conditions of this permit; and
 - At reasonable times to have access to and copy any records required to be kept under the terms and conditions of this permit, to inspect any monitoring methods required in this permit, and to require stack emission testing (i.e., performance tests) in conformance with state approved or accepted EPA procedures when deemed appropriate by the Director.
- D. Except for data determined to be confidential under Section 9-342A, Idaho Code, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the appropriate regional office of the Division of Environmental Quality.
- E. Nothing in this permit is intended to relieve or exempt the Permittee from compliance with any applicable federal, state, or local law or regulation, except as specifically provided herein.
- F. In the event of any change in control or ownership of source(s) from which the authorized emissions emanate, the Permittee shall notify the succeeding owner or controller of the existence of this permit by letter, a copy of which shall be forwarded to the Director.
- G. This permit shall be renewable on the expiration date, provided the Permittee submits any and all information necessary for the Director to determine the amount and type of air pollutants emitted from the equipment for which this permit is granted. Failure to submit such information within sixty (60) days after receipt of the Director's request shall cause the permit to be voided.
- H. The Director may require the Permittee to develop a list of Operation and Maintenance Procedures to be approved by DEQ. Such list of procedures shall become a part of this permit by reference, and the Permittee shall adhere to all of the operation and maintenance procedures contained therein.
- Performance tests (i.e.; air emission source tests) conducted pursuant to testing requirements in this permit must be conducted in accordance with IDAPA 16.01.01.157. Such testing shall not be conducted on weekends or state holidays unless the Permittee obtains prior DEQ approval.

The Permittee shall submit a proposed test date for each performance test required by this permit to DEQ for approval at least fifteen (15) days prior to each respective test date (including each test date for periodic tests such as, for example, annual tests). The Permittee shall promptly notify DEQ of any change in the proposed test date and shall provide at least five (5) working days advanced notice prior to conducting any rescheduled test, unless DEQ approves a shorter notice period.

Within thirty (30) days of the date on which a performance test required by this permit is concluded, the Permittee shall submit to DEQ a performance test report for the respective test. The performance test report shall include any and all process operating data required to be recorded during the test period as well as the test results, raw test data, and associated documentation.

The maximum allowable source operating rate shall be limited to 120% of the average operating rate attained during the most recent performance test conducted pursuant to this permit, for which a test protocol has been granted prior approval by DEQ, which demonstrated compliance with the respective pollutant emission limit unless; (1) a more restrictive operating limit is specified elsewhere in this permit or; (2) at such an operating rate, emissions would exceed any emission limit(s) set forth in this permit.

J. The provisions of this permit are severable; and if any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.

ISSUED: December 22, 1999 EXPIRES: December 22, 2004